APPENDIX D

**ALLOWANCE EQUIPAGE LIST**

**PREPARATION AND PROCESSING**

**Table of Contents**

6-D.0 INTRODUCTION

6-D.1 AEL DEFINITION

6-D.2 AEL PREPARATION

6-D.3 POLICY

6-D.4 SCOPE

6-D.5 RESPONSIBILITIES

 6-D.5.1 Naval Sea Systems Command (NAVSEA)05

 6-D.5.2 Ship Program Managers (SPMs)

 6-D.5.3 Participating Acquisition Resource Managers

 (PARMs)

 6-D.5.4 Naval Surface Warfare Center Carderock Division Ship Systems Engineering Station

 (NSWCCD SSES)

 6-D.5.5 Naval Supervising Activity (NSA)**.**. 10

 6-D.5.6 In-Service Engineering Agents (ISEA) 10

 6-D.5.7 Naval Sea Logistics Center (NAVSEALOGCEN)

 6-D.5.8 Naval Supply Systems Command Weapon Systems Support(NAVSUP WSS)

ATTACHMENT 1 NON-AEL WORTHY ITEMS

ATTACHMENT 2 INFORMATION ONLY AELS

6-D.0 INTRODUCTION

This appendix provides specific instructions for the preparation and processing of Allowance Equipage Lists (AELs). It implements the policies and supplements the responsibilities set forth in the Allowance Chapter of this manual. It defines AELs, identifies AEL categories, and provides procedures to be followed in the preparation of an AEL. It provides guidance on the preparation and use of AELs and finally, it describes the method of establishing requirements for unique systems and the method used to extract the data required to prepare AELs for portable electronic test equipment.

6-D.1 AEL Definition

AELs establish allowances for items that are required to perform a specific operational function; are needed for the performance of maintenance actions; and are needed for the safety and protection of personnel. Materials that are identified and provided through AELs are generally identified as Operating Space Items (OSI) in the ship's Coordinated Shipboard Allowance List (COSAL) and are loaded into specific shipboard within the custody of the operating department responsible for the space.

Part I. The COSAL Summary of Allowance Parts/Equipage lists identifies the AELs that apply to the ship, while Part II Section C of the COSAL contains the full associated AELs. Part III Section B of the COSAL provides a Stock Number Sequence List (SNSL) of the OSI authorized to be on the associated ship. AELs include technical and logistic information related to specific equipage categories.

All AELs fall into one of the following categories:

0 - Ordnance Related Equipage and OSI

1 - Shipboard Spaces and System/Equipment Oriented Equipage and OSI

2 - Miscellaneous Shipboard Equipage and Support Material

3 – Hull Unique Portable Commercial-off-the-Shelf/Non-Developmental Items (COTS/NDIs) and HAZMAT.

4 - Flag Allowance

5 - Strategic Systems Program (SSP) Equipage and OSI

6 - Special Propulsion Plant Equipage and OSI

7 - Portable Electronic Test Equipment

8 - TRIDENT Submarine Unique

9 - Nuclear Weapons

Most of the above categories are self-explanatory based on their nomenclature. However, the following paragraphs serve to provide a brief explanation of those less self-explanatory.

A Flag allowance shall be included in the COSAL for ships that are designated to carry Flag Officers and their staffs on board as part of their mission. Special allowance for Flags may be authorized for any ship in the Fleet when it is designated to carry a Flag or associated Staff. AELs for Flags and Staffs have a **4-00000** designation and are to provide extra equipage and OSI for general housekeeping, offices, navigation, and personnel oriented support.

Fleet Ballistic Missile (FBM) program equipage is identified on **5-00000** AELs.

Nuclear Reactor Plant Equipage is identified on **6-00000** AELs. Ships that have this type of propulsion will have a special COSAL segment for Reactor Plants and will have equipage and OSI that is identified by **6-00000** AELs.

The Weapon Systems File (WSF) creates **7-00000** AELs for portable Electronics Test Equipment.

AEL numbers in the **8-00000 series** are reserved for the use of the TRIDENT Submarines.

AEL numbers in the **9-00000 series** are reserved for Nuclear Weapons Equipage.

The items in Attachment 1 to this appendix are considered to be Non-AEL Worthy. Attachment 2 to this appendix identifies items that are included in the COSAL for Information only and are included in AELs.

If there are any questions regarding the assignment of AEL numbers, contact Naval Sea Systems Command (NAVSEA 04L) or Naval Sea Logistics Center (NAVSEALOGCEN 05314) for resolution.

6-D.2 AEL Preparation

Preparation of AELs is a complex task requiring the review of ship design plans and specifications to determine the equipage and OSI required for the operation and safety of the ship and the personnel assigned to it. The Plans, Specifications, and Technical Manuals provide the information needed to determine equipage and OSI for system or equipment related AELs. AELs shall be prepared via the Interactive Computer Aided Provisioning System (ICAPS) as outlined in the provisioning chapter or on NAVSEA Form 4441/1 format as follows (the upper case print denotes the block on the form; a copy of NAVSEA Form 4441/1 is provided as Figure D-1):

1. EQUIPAGE NOMENCLATURE/CHARACTERISTICS - Enter the noun name of the equipage category. (Limited to 48 characters.)
2. TECHNICAL DOCUMENT NUMBER -
* MANUAL - Enter technical manual identification if applicable
* DRAWING - Enter the applicable drawing and piece number. If the equipage is ship related, enter the appropriate ship plan and specification.
1. IDENTIFICATION NUMBER - Develop and enter the AEL number as follows:
* Electronic, Gunfire Control System (GFCS) and Ordnance Program Support Equipment AELs:

These Identification Numbers are computer assigned by NAVSUP WSS during the provisioning process.

* Hull, Mechanical and Electrical (HM&E) Equipment and Trident Submarine AELs:

Positions 1 through 7 shall be filled with one of the category codes listed below:

 1-16xxx Bow & Stern Gate Rigging

1-20xxx Tools & Equipments, Capstans & Windlasses

1-21xxx Misc. Packing & Gaskets, Hoses & Fittings

1-22xxx Tools & Equipments, Steering & Diving Systems

1-23xxx Nitrogen Systems

1-24xxx Periscope Housing Fittings

1-34xxx Galley Equipment

1-36xxx General Purpose Garbage Disposal & Waste Water Systems

1-37xxx Propane Gas & Cylinders

1-38xxx Air Purifying & Ventilation Systems

1-41xxx Misc. Tools & Equip. Propulsion & Diesel Engine

1-44xxx Misc. Lifting & Handling Shafts & Seals

1-48xxx Misc. Tools & Equip., Hoses & Fittings, Piping Systems

1-59xxx Misc. Tools & Equip., Hoses & Fittings, Piping Systems

1-62xxx Misc. Electrical Connectors & Batteries

1-65xxx Audible Signaling Devices

1-67xxx Misc. Sonar System Handling Equipment

1-78xxx Ammunition Handling & Securing Tiedowns

1-87xxx Thermometers & Gages

1-91xxx Hand Tools & Equipments, Various Shops

2-1200x Life Rings, Buoys & Accessories

2-1500x Misc. Refueling Equipment

2-1600x Ladders, Brows, Staging, Scaffolding & Boatswains Chairs

2-1800x Riggings & Anti-Corrosion Covers

2-2000x Replenishment At Sea Handling & Rigging

2-2100x Hydraulic Fluid Filter Units

2-2200x Emergency Steering Gear

2-2300x Refrigerant Gas Cylinders

2-2400x Navigational Equipment & Accessories

2-2500x Towing Gear & Hawsers

2-2600x Anchoring, Mooring & Towing Equipment

2-2700x Cargo Handling, Lashings & Tiedowns

2-3200x Office & Chaplains Equipment

2-33001 Life Preservers & Accessories

2-33002 Air Purification, Submarine Escape & Rescue Equipment

2-33007 Protective Clothing & Helmets

2-35000 Laundry Equipment & Accessories

2-37xxx Medical & Dental Equipment

2-3800x Air Handling & Dehumidification Equipment & Accessories

2-4100x Tools & Equipment, Lifting & Handling Gear, Propulsion Equipment

2-4300x Tools & Equipment, Lifting & Handling Gear, Main Shaft

2-4700x Portable Pumps

2-4800x Hoses & Fittings, Misc.

2-5100x Tools & Equipments, Misc. Boiler Applications

2-5500x Fueling At Sea (FAS) Tools & Testing/Measuring Equipment

2-5600x Boiler/Feed Water Testing Equipments & Compounds

2-5900x Tools & Equipment, Refrigeration and Air Conditioning

2-6200x Tools & Equipment, Electrical Cables and Shore Power

2-6400x Portable Lighting

2-6500x Portable Non-Electronic Communications Equipment

2-6600x Portable Signaling Lights

2-6700x Tools & Equipments, Electrical and Electronic Repair

2-7000x Flags and Pennants

2-7500x Torpedo & Mine Handling Equipment

2-7700x Chemical, Biological & Radiological (CBR) Tools & Test Equipments, Respirators & Protective Clothing

2-81xxx Minesweeping Gear

2-82xxx Small Boats & Crafts, Life Boats & Rafts, Equipage & Accessories

2-83xxx Aircraft Handling Tools & Equipments

2-85xxx Photographic Equipment & Supplies

2-87xxx Instruments, Testing, Measuring, Indicating

2-88xxx Damage Control Equipment

2-92xxx Misc. Tools & Equipments, Jacks & Hoists, Welding Gasses & Equipments

2-93xxx Fire Fighting Hoses, Nozzles, Fittings, Protective Clothing and Breathing Apparatuses.

2-94xxx Rescue and Salvage Tools & Equipment

2-95xxx Diving Equipment

2-99xxx Misc. Tools & Equipment, Spec Warfare, SEAL teams, Coast Guard

3-NDIxx Portable COTS/NDI items

3-HZxxx Haz-Mat Consumables.

4-xxxxx Flag Officers' (and their staffs') allowances

 8-xxxxx Trident Submarine

Positions 8 through 11 reflect a numeric serial number.

1. DATE - Enter the calendar date the AEL is prepared.
2. PAGE - Number pages consecutively
3. CHARACTERISTICS - Enter the characteristics of equipage.
4. SERVICE APPLICATION CODE - Enter a Service Application Code (SAC) constructed from the following:
* Service Application - Enter the description of the service application followed by the SAC obtained from current Navy directives.
* Column - Enter the column to be used.
* Responsibility - Enter code identifying responsibility for procurement of equipage and OSI listed on the AEL.
1. INDIVIDUAL ITEM IDENTIFICATION - Enter the following data for each item of equipage or OSI:
* Reference Number - drawing and piece number or valid manufacturer's part number
* Item Name
* National Stock Number (NSN) (if available)
* Commercial and Government Entity (CAGE)
* Unit of Issue
* Quantity required - application by column



 Figure D-1

NAVSEA Form 4441/1

6-D.3 Policy

The following policy shall apply to the development of AELs:

1. There shall be an accurate and complete AEL developed for each Ship, Ship Class, as well as systems and equipment, that require equipage or OSI for operation, maintenance, or testing.
2. AELs shall be developed while a ship is under construction and maintained for the life cycle of the ship. AELs shall be reviewed for updating and change whenever a ship undergoes a conversion, overhaul, or availability.
3. System and equipment related AELs shall be prepared when the system or equipment is under acquisition. System and equipment related AELs shall be maintained and updated whenever the system or equipment receives an alteration based on an approved design change.
4. A Baseline AEL conference will be held in accordance with the Joint Instruction NAVSEA 4441.7B/NAVSUP 4441.29, Supply Readiness Objective and Milestones.

6-D.4 SCOPE

1. The following categories of equipage require allowance change approval action by the cognizant In-Service Engineering Agents (ISEAs). Only the ISEA is authorized to adjust the ship’s initial fitting-out allowance of equipage material in the categories listed below. Requests for changes to AELs in the categories listed below must be routed to the cognizant ISEA (or designated representative) for review and approval. (See the Allowance Update and Maintenance Chapter for processing of Allowance Change Requests.)

| **AEL CATEGORY** | **EQUIPAGE** |
| --- | --- |
| 0-xxxxx | Ordnance Equipage |
| 2-12001 | Life Buoys, Rings, & Accessories |
| 2-15xxx | Misc., Refueling Equipment |
| 2-24xxx | Navigation |
| 2-33001 | Life Preservers and Accessories |
| 2-33002 | Air Purification, Submarine Escape and Rescue Equipment |
| 2-37xxx | Medical Equipment |
| 2-51xxx | Misc. Boiler Applications |
| 2-55xxx | Fueling at Sea, Misc. Fuel Test and Measuring Equipment |
| 2-56xxx | Boiler Feed Water Test Equipment |
| 2-70xxx | Flags and Pennants |
| 2-75xxx | Torpedo and Mine Handling Equipment |
| 2-77xxx | Chemical, Biological, and Radiological Equipment, Test Kits, and Respirators |
| 2-81xxx | Minesweeping Gear |
| 2-82xxx | Small Boats & Crafts, Equipage |
| 2-87xxx | Instruments, Testing, Measuring, Indicating |
| 2-88xxx | Damage Control Equipment |
| 2-93xxx | Fire Fighting, Breathing Apparatus |
| 2-94xxx | Salvage Equipment |
| 2-95xxx | Diving Apparatus |
| 4-xxxxx | Flag Officers’ (and their staffs’) allowances |
| 5-xxxxx | Equipage & OSI for Fleet Ballistic Missiles |
| 6-xxxxx | Nuclear Equipment |
| 7-11xxx | SPAWAR Electronics |
| 7-67xxx | Portable Communications, Infrared, RADIAC, SONAR, Electrical and Electronic Testing Equipment |

1. All other AEL categories (other than those listed in 6-D.4 Paragraph a) are categories in which the Naval Supervising Activity (NSA) has been granted the authority to make adjustments in the ship’s initial fitting-out allowance of equipage material. These adjustments need not be reported to the cognizant ISEA. (See the Allowance Update and Maintenance Chapter for processing of Allowance Change Requests.) In exercising this delegated authority, the NSA shall observe the following:
2. The total cost of all such locally authorized adjustments shall not exceed two percent of the total cost of the equipage allowance in this category as tabulated in Part III, Section B of the ship’s first published COSAL.
3. Weight, moment, and space limitations will constrain these adjustments to a ship’s initial outfit.

6-D.5 Responsibilities

The following responsibilities shall be assumed and the functions assigned shall be accomplished:

6-D.5.1 Naval Sea Systems Command (NAVSEA) (04L) Shall:

1. Provide policy and guidance for the development and utilization of AELs.
2. Provide budgeting and funding as required to develop AELs.

6-D.5.2 Ship Program Managers (SPMs) Shall:

1. Designate a comparable ship to be used in the development of ship level AELs.
2. Require Participating Acquisition Resource Managers (PARMs) to have AELs prepared for new systems and/or equipment.
3. Interface with NAVSEA damage control personnel and Fleet Commanders to ensure that ship level damage control and safety related AELs are developed and included in each ship's COSAL.
4. Provide ship level drawings to the applicable Technical Support Activity (TSA) responsible for provisioning the ship, to NAVSEALOGCEN, and to the Naval Inventory Control Point- Mechanicsburg (NAVSUP WSS) to be used in the preparation of ship level AELs.
5. Require the applicable TSA or ISEA to determine which AELs are required for system and equipment certification.
6. Ensure that AELs are entered into CDMD-OA as part of Configuration Overhaul Planning (COP).
7. Ensure AELs that are above the baseline of a comparable ship are developed by shipbuilder and/or NSA during new construction.

6-D.5.3 Participating Acquisition Resource Managers (PARMs)

 Shall:

1. Include the requirement for system and equipment drawings in acquisition contracts. These drawings shall be adequate to determine equipage required to operate and maintain the system or equipment as well as define which equipage is required for shipboard certification of the system or equipment.
2. Interface with the designated TSA to ensure that adequate AEL data is provided to NAVSEALOGCEN and NAVSUP WSS for the preparation and publication of AELs. Each published AEL shall provide adequate equipage for the operation and maintenance of systems and equipment and for alterations and modifications of systems and equipment.

6-D.5.4 Naval Surface Warfare Center Carderock Division Ship Systems Engineering Station (NSWCCD SSES) Shall:

1. Chair the annual conference to update HM&E AELs.
2. Update and maintain an AEL database on Chemical, Biological and Radiological(CBR) equipment. Ensure this database is compatible with Interactive Computer-Aided Provisioning System (ICAPS) to provide for rapid update of the WSF via NAVSEALOGCEN.
3. Update and maintain an AEL database on Hazardous Materials (HAZ-MAT) consumables. Ensure this database is compatible with ICAPS to provide for rapid update of the WSF via NAVSEALOGCEN.

6-D.5.5 Naval Supervising Activity (NSA) Shall:

1. Develop required AELs from drawings, ship contract specifications, etc.
2. Report all AELs to the ship's Configuration Data Manager (CDM).
3. Provide Provisioning Technical Documentation (PTD) and NAVSEA Form 4441/1 to support new or revised AELs to the applicable TSA.

6-D.5.6 In-Service Engineering Agents (ISEA) Shall:

1. Review systems and equipment drawings (including revisions) to determine equipage requirements.
2. Determine equipage validation requirements for systems and equipment.
3. Provide AEL data to NAVSEALOGCEN or NAVSUP WSS.

6-D.5.7 Naval Sea Logistics Center (NAVSEALOGCEN) Shall:

1. Review and validate all requests for new AEL development or changes to existing AELs under NAVSEALOGCEN cognizance and assist in their preparation.
2. Assign permanent AEL numbers for equipage categories under NAVSEALOGCEN cognizance.
3. Review data, plans and drawings provided by NSAs, ISEAs, TSAs, SPMs, and PARMs, to validate AEL requirements for equipage categories under NAVSEALOGCEN cognizance.
4. Maintain the AEL data in ERP for equipage categories under NAVSEALOGCEN cognizance.

6-D.5.8 Naval Supply Systems Command Weapon Systems Support (NAVSUP WSS):

1. Review data, plans, and drawings provided by NSAs, ISEAs, TSAs, SPMs, and PARMs to validate AEL requirements.
2. Maintain the AEL data in the WSF.
3. Publish COSALs on an as required basis to provide AEL indexes and the ship's allowance list.

ATTACHMENT 1

NON-AEL WORTHY ITEMS

1. The following items are not AEL worthy:
	1. Items that are installed and require no repair parts or foreseeable replacement, e.g. bookcases, benches, cleats.
	2. Items that are usually fabricated or assembled on site from locally available materials.
	3. Items that are portable and readily available from commercial sources for both outfitting and replacement, have no application to any installed equipment, and have no operational or military necessity.

The listing below provides examples (Note--This listing is representative and shall not be construed as "All-Inclusive".):

ADAPTERS - Hose & Pipe (miscellaneous installed)

AIRSCOOPS - Airport; portlight

AWNINGS

BASES - Cabinets & Equipments

BENCHES - Mess & Dining

BERTHS & BEDS

BILGE PAD ASSEMBLIES - Boat

BOOKRACKS

BOOKCASES

BOARDS - Absentee, bulletin, nameplate, etc.

BRIDLE PLATES AND YOKES

BROWS - Aluminum or wood

BUCKLERS - Turret, fabric

BUFFETS - Dining

BULLETIN BOARDS

BOXES - Fire alarm (breakage type for CO2 activation)

CABINETS - Filing, storage, washroom, etc.

CAMERAS - (Naval Air Systems Command (NAVAIR) Publication (Pub.))

CANOPIES

CASTERS - Chair, gang plank

CHAIRS

CHOCKS

CLAMPS - Hose miscellaneous installed

CLEATS - Installed

CLEATS - Rod end (installed)

COMPUTER PERIPHERIALS – Printers, Scanners, Projectors, Pointing

 Devices, Servers, LANS, WANS, etc.

COMPUTERS, PERSONAL - Laptop and Desktop

COUPLINGS - Hose miscellaneous (for minor drains, washdown)

COVERS - Furniture, chair, canvas (bulk material)

COVER ASSEMBLY - Hatch

CRADLES - Boat, torpedo

CURTAINS - Airport, door, shower

DAVITS - Portable (pipe type)

DEADLIGHTS - Airport or portlight

DECK FITTINGS FOR BLOCKS, etc.

DISCS - Safety Pressure for CO2 extinguisher

DISPENSER - Dish, tray, soap

DOGS - Hatch, scuttle

DOLLY - Boat stowage

DOORS

DOOR MATS

ENTERTAINMENT EQUIPMENT - Television, Video Recorders, Speakers, Stereo Equipment, etc.

EYELET FASTENER - Installed

FAIRLEADERS

FILES

FITTINGS - Lubrication (installed)

FITTINGS - Door, locker, drawer

FOOT STOOLS

FORMS - Message Blanks, etc.

FRAMES - Door, hatch

FURNITURE - Chairs, decks, tables, sofas, etc.

GEAR - Operating (for remote valves)

GEAR - Regunning

GLASS - Airport, portlight, pullbox for fire

Greases – Non-HAZMAT (Should be listed in GUCL)

GRIPES - Outside, inside

GUN - Line throwing

GUN - Spray water (installed type for laundry press)

HAMMOCK

HAMPERS

HANDRAILS

HANDLES - Door

HATCHES

HEADS - Sprinkler installed

HOLDERS - Clinical chart, sputum cup (on BUMED portion of COSAL)

HOSE - Miscellaneous lengths and fittings (steaming out, tank filling drains, etc.)

HULL FITTINGS - Miscellaneous

INSTRUMENTS - Musical

LADDERS - Accommodation

LADDERS - Jacobs (Non-standard lengths)

LANYARDS

LIGHT FIXTURES - Installed

LIGHT LOCKS

LINKS - Fabricated types (eye pad)

LOCKERS - Poison antidote, safe, etc.

LOCKING DEVICES - Cypher locks, pad locks, combination locks, key locks, etc.

LUBRICANTS – Non-HAZMAT (Should be listed in GUCL)

MARKERS - Luminous radioactive

MESSING APPLIANCES - Toasters, blenders, waffle makers, hand mixers, etc.

MINE CLEARING CABLES - Installed fittings

NETS - Safety (Installed)

NIPPLES - Hose and pipe (installed)

NOZZLES - Hose miscellaneous (garden type, washdown, etc.)

PADS - Table

PADDLES - Signal (Fabricated per Naval Warfare Publication (NWP)

 38))

PADEYES

PHYSICAL FITNESS EQUIPMENT

PLATES - Surface, bending, bench

POCKETS - File visible (for file cabinets)

PORTLIGHTS

PROJECTORS - Film, slide, movie, overhead, etc.

PUBLICATIONS

RACKS - Book, swab

RAMPS - Portable type (stowed on bulkheads)

REDUCERS - Hose miscellaneous (minor drains, washdown, etc.)

RINGS - Curtain, shower, window

RUGS

SAFES

SAFETY DISCS - Pressure CO2

SCOOPS - Air, (for airport, portlights, windows)

SCREENS - Film, slide, movie, overhead, etc.

SEATS - Bench, bucket, chair, stool, etc.

SINKS - Plate processing

SLABS - Bending, Welding

SLIP COVERS - Furniture

SOFTWARE

SOLVENTS – Non-HAZMAT (Should be listed in the GUCL)

SPRAY GUNS - Water overhead for laundry press

STAFFS - Jack, ensign

STAGES - Metal, wood, plastic

STANCHIONS - Awning, handrail

STANDS - Instrument, dressing (medical bed service)

STATION MARKER BOXES (fabricated per NWP 38)

STATION MARKERS (fabricated per NWP 38) STOOLS - Foot

STRONGBACKS - Boat, winch

STUD ASSEMBLIES - Holding type (bulkhead, deck house)

TABLES - Mess, end, coffee, chart, writing

TANKS - Small portable type (oil stowage, acid mix, day tanks)

TAPE - Luminous deck marking

TELEPHONES - Cellular, installed, etc.

TIPS - Chair Leg

THIMBLES - Rope rigging

THWARTS - Portable

TOGGLES - Toggle pins

TOPS - Cabinets filing

TUBS - Cleaning, quenching, galley

VATS - Cleaning, stowage

VISES - Machinist

WEATHER CLOTHS

WEDGE BAR ASSEMBLIES - Special for test castings

WINDOWS

WIND SCREENS - Landing Officers

WORK BENCHES

WRENCHES - Non-standard (deck, drain, hatch, etc.)

ATTACHMENT 2

INFORMATION ONLY AELs

1. The following items are to be included in COSALs for information only. Mark-up applicable AEL with required quantities for local use only.
	1. Canvas Covers for the following types of equipment:
		1. Lifting Gear - (COSAL to show plans only in AEL series 2-41006, 2-92003**)**
		2. Rigging - (2-18001 series) (show only spare blocks, ropes, etc.)

**ATTACHMENT 3**

**AEL MANAGEMENT RESPONSIBILITY CHART**

